RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/789,526 A
Source:

Date Processed by STIC:

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 09/19/2006
PATENT APPLICATION: US/10/789,526A TIME: 13:18:04

Input Set : A:\PTO.SS.txt

```
3 <110> APPLICANT: George Tachas
       Kenneth W. Dobie
        Ravi Jain
        Christopher Ian Belyea
 6
        Mark Andrew Heffernan
 9 <120> TITLE OF INVENTION: MODULATION OF GROWTH HORMONE RECEPTOR EXPRESSION AND
                                                                     (pg.6-7)
10 INSULIN LIKE GROWTH FACTOR EXPRESSION
12 <130> FILE REFERENCE: BIOL0002US
14 <140> CURRENT APPLICATION NUMBER: 10/789,526A
15 <141> CURRENT FILING DATE: 2004-02-26
17 <150> PRIOR APPLICATION NUMBER: 60/451,455
18 <151> PRIOR FILING DATE: 2003-02-28
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23 <210> SEQ ID NO: 1
24 <211> LENGTH: 20
25 <212> TYPE: DNA
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
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39 <213> ORGANISM: Artificial Sequence
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52 <213> ORGANISM: Artificial Sequence
54 <220> FEATURE:
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65 <213> ORGANISM: H. sapiens
67 <220> FEATURE:
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Input Set : A:\PTO.SS.txt

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75				_									Met				
76 78	cac	cta	cta	t+a	200	ttg	ac a	cta	aca	aas	taa	agt	1 cet	act	+++	tat	103
						Leu											103
80	5					10				2	15					20	
82	gga	agt	gag	gcc	aca	gca	gct	atc	ctt	agc	aga	gca	ccc	tgg	agt	ctg	151
83	Gly	Ser	Glu	Ala	Thr	Ala	Ala	Ile	Leu	Ser	Arg	Ala	Pro	Trp	Ser	Leu	
84					25					30					35		
		_	-			ggc		_					-				199
	Gln	Ser	Val		Pro	Gly	Leu	Lys		Asn	Ser	Ser	Lys		Pro	Lys	
88				40					45					50			247
						tca Ser											247
92	PHE	1111	БуБ 55	Cys	Arg	Ser	PIO	60	Arg	GIU	1111	Pne	65	Cys	птъ	пр	
	aca	gat.		at.t.	cat	cat	aat.		aag	aac	cta	gga		ata	caq	cta	295
						His											2,3
96		70					75		-1-			80					
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99	Phe	Tyr	Thr	Arg	Arg	Asn	Thr	Gln	Glu	Trp	Thr	Gln	Glu	Trp	Lys	Glu	
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	_	Pro	Asp	Tyr			Ala	Gly	/ Glu			Cys	Tyr	Phe		n Ser	
104					105					110					115		
	_									_		_			_	aat	439
108		PITE	1111	120		: iip	11e	PIC	125	_	TTE	; rìàg	ьeu	130		Asn	
		aat	aca			. daa	aad	tat			att	· dat	gaa			g caa	487
																Gln	407
112	_	1	135				-7-	140					145				
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115	Pro	Asp	Pro	Pro	Ile	Ala	Leu	Asn	Trp	Thr	Let	ı Leu	Asn	Val	Sei	Leu	
116		150					155					160					
																aat	583
		Gly	' Ile	His	Ala	_		Gln	ı Val	. Arg			Ala	Pro	Arc	g Asn	
	165					170					175					180	631
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124		ASP	, 116	GIII	. Буг 185	_	пр	Met	. vaı	. шец 190		TIYE	GIU	Leu	195	Tyr	
		gaa	ata	aat			222	taa		-		ı dac	cct	ata		, g aca	679
		-	_		_					_	_	_			_	Thr	0.5
128				200			-1 -		205			- 2		210			
		tca	gtt			tac	tca	ttg			gat	aag	gaa			gtg	727
			_					_				_	-		_	ı Val	
132			215					220					225				•
134	cgt	gtg	aga	tcc	aaa	caa	cga	aac	tct	gga	aat	tat	ggc	gag	tto	agt	775

Input Set : A:\PTO.SS.txt

135 136	Arg	Val 230	Arg	Ser	Lys	Gln	Arg 235	Asn	Ser	Gly	Asn	Tyr 240	Gly	Glu	Phe	Ser	
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								Pro									
	245			-		250					255				-	260	
		gat	ttc	tac	+++		taa	ctc	tta	att		ato	+++	aas	ata		871
	_	_															0/1
	GIU	ASP	PIIE	ıyı		PIO	пр	Leu	ьeu		TIE	тте	Pne	GIY		Pile	
144					265					270					275		
					_			gta						_			919
147	Gly	Leu	Thr	Val	Met	Leu	Phe	Val	Phe	Leu	Phe	Ser	Lys	Gln	Gln	Arg	
148				280					285					290			
150	att	aaa	atg	ctg	att	ctg	CCC	cca	gtt	cca	gtt	cca	aag	att	aaa	gga	967
151	Ile	Lys	Met	Leu	Ile	Leu	Pro	Pro	Val	Pro	Val	Pro	Lys	Ile	Lys	Gly	
152		-	295					300					305		-	•	
154	atc	gat	cca	gat	ctc	ctc	aaq	gaa	gga	aaa	tta	gag	gag	ata	aac	aca	1015
								Glu									1010
156	110	310	110	710p	Deu	шси	315	Olu	Ory	цуз	пси	320	GIU	Val	T D II	1111	
																	1063
								tat									1063
		Leu	Ala	тте	His	_	Ser	Tyr	ьуs	Pro		Phe	His	Ser	Asp	_	
	325					330					335					340	
								cta									1111
163	Ser	Trp	Val	Glu	Phe	Ile	Glu	Leu	Asp	Ile	Asp	Glu	Pro	Asp	Glu	Lys	
164					345					350					355		
166	act	gag	gaa	tca	gac	aca	gac	aga	ctt	cta	agc	agt	gac	cat	gag	aaa	1159
								Arg									
168				360	_				365					370		2	
	tca	cat	agt		cta	aaa	ata	aag		aac	gac	tct	aaa		acc	adc	1207
								Lys									1207
172	Ser	1113	375	POII	шец	Gry	vai	380	Asp	Gry	Asp	SEL	_	Arg	1111	PCT	
													385				1055
								gag									1255
	Cys	_	GIU	Pro	Asp	ше		Glu	Thr	Asp	Pne		Ala	Asn	Asp	11e	
176		390					395					400			•		
178	cat	gag	ggt	acc	tca	gag	gtt	gct	cag	cca	cag	agg	tta	aaa	ggg	gaa	1303
179	His	Glu	Gly	Thr	Ser	Glu	Val	Ala	Gln	Pro	Gln	Arg	Leu	Lys	Gly	Glu	
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182	gca	gat	ctc	tta	tgc	ctt	gac	cag	aag	aat	caa	aat	aac	tca	cct	tat	1351
183	Ala	Asp	Leu	Leu	Cys	Leu	Asp	Gln	Lvs	Asn	Gln	Asn	Asn	Ser	Pro	Tyr	
184		-			425		_		-	430					435	-	
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								Gln									2000
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																	1 4 4 17
								cct									1447
	ьys	Asn	_	Pro	GIN	Pro	Leu	Pro	Thr	Glu	Gly	Ala		ser	Thr	HIS	
192			455					460					465				
								agc									1495
195	Gln	Ala	Ala	His	Ile	Gln	Leu	Ser	Asn	Pro	Ser	Ser	Leu	Ser	Asn	Ile	
196		470					475					480					
198	gac	ttt	tat	gcc	caq	gtq	agc	gac	att	aca	cca	gca	gat	aqt	qtq	qtc	1543
								Asp									
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Input Set : A:\PTO.SS.txt

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202	ctt tcc	ccg	ggc	caa	aaq	aat	aaq	gca	ggg	atg	tcc	caa	tqt	qac		1591
	Leu Ser															
204			-	505	-		-		510				-	515		
206	cac ccg	gaa	atg	gtc	tca	ctc	tgc	caa	gaa	aac	ttc	ctt	atg	gac	aat	1639
	His Pro	_	_	_			_		_				_	_		
208			520				_	525					530	_		
210	gcc tac	: ttc	tgt	gag	gca	gat	gcc	aaa	aag	tgc	atc	cct	gtg	gct	cct	1687
	Ala Tyr															
212		535					540					545				
214	cac ato	aag	gtt	gaa	tca	cac	ata	cag	cca	agc	tta	aac	caa	gag	gac	1735
215	His Ile	Lys	Val	Glu	Ser	His	Ile	Gln	Pro	Ser	Leu	Asn	Gln	Glu	Asp	
216	550)				555					560					
218	att tac	atc	acc	aca	gaa	agc	ctt	acc	act	gct	gct	ggg	agg	cct	ggg	1783
219	Ile Tyr	lle	Thr	Thr	Glu	Ser	Leu	Thr	Thr	Ala	Ala	Gly	Arg	Pro	Gly	
220	565				570					575					580	
222	aca gga	gaa	cat	gtt	cca	ggt	tct	gag	atg	cct	gtc	cca	gac	tát	acc	1831
223	Thr Gly	, Glu	His	Val	Pro	Gly	Ser	Glu	Met	Pro	Val	Pro	Asp	Tyr	Thr	
224				585					590					595		
	tcc att															1879
	Ser Ile	His	Ile	Val	Gln	Ser	Pro	Gln	Gly	Leu	Ile	Leu	Asn	Ala	Thr	
228			600					605					610			
	gcc ttc															1927
	Ala Leu		Leu	Pro	Asp	Lys		Phe	Leu	Ser	Ser	-	Gly	Tyr	Val	
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	agc aca									tag	ccti	tctt	tg 9	gttt	cccaag	1980
	Ser Thr	_	Gin	Leu	Asn	_	тте	Met	Pro							
236			+++			635	- ~ - ~ +	- ~~	~~~	. +		- +				2040
	agctacc			_		_	_				_	_	_		_	2100
	ttaaacc aatgttg															2160
	tgtgcaa															2220
	atattgt															2280
	aaatcac		_		_	_	_	-	-			-		_	_	2340
	atgcaaa			-	-	_		_		-	_				_	2400
	aaaaaaa		_		-		_	-	-			-				2460
	ggatato					_				_	-		_		-	2520
	tcaagca															2580
	taaggag															2640
	aaaaaca															2700
	taaaatg															2760
	aagtatt															2820
266	aaagaag	taa	aagca	aaaa	aa ga	aaaa	cttt	ctt	caco	caaa	tctt	ggtt	ga 1	gcca	aaaaa	2880
268	aaataca	tgc	taaga	agaaç	gt ag	gaaat	cata	a gct	ggtt	cac	acto	gacca	aag a	atact	taagt	2940
	gctgcaa															3000
272	tagccto	tgc	agcgg	gaato	t gt	tcac	cacco	aac	cttg	gttt	tgct	acat	aa 1	ttato	ccagga	3060
274	agggaat	aag	gtaca	agaa	ag ca	atttt	gtaa	a gtt	gaag	gcaa	atc	gaato	gaa a	attaa	actggg	3120
276																
	taatgaa ctcattt															3180 3240

Input Set : A:\PTO.SS.txt

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	aggatttatt taaaatagca aaagaagaag tttcatcatt ttttacttcc tctctga	
284	gactggcctc aaagcaagca ttcagaagaa aaagaagcaa cctcagtaat ttagaaa	tca 3420
286	ttttgcaatc ccttaatatc ctaaacatca ttcatttttg ttgttgttgt tgttgtt	gag 3480
	acagagtete getetgtege caggetagag tgeggtggeg egatettgae teaetge	
290	ctccacctcc cacaggttca ggcgattccc gtgcctcagc ctcctgagta gctggga	cta 3600
292	caggcacgca ccaccatgcc aggctaattt ttttgtattt tagcagagac ggggttt	cac 3660
294	catgttggcc aggatggtct cgagtctcct gacctcgtga tccacccgac tcggcct	ccc 3720
296	aaagtgctgg gattacaggt gtaagccacc gtgcccagcc ctaaacatca ttcttga	agag 3780
298	cattgggata tctcctgaaa aggtttatga aaaagaagaa tctcatctca	ata 3840
300	cttctcattt tttaaaaaag cttaaaactt tgaagttagc tttaacttaa atagtat	ttc 3900
302	ccatttatcg cagacctttt ttaggaagca agcttaatgg ctgataattt taaattc	tct 3960
304	ctcttgcagg aaggactatg aaaagctaga attgagtgtt taaagttcaa catgtta	ttt 4020
306	gtaatagatg tttgatagat tttctgctac tttgctgcta tggttttctc caagago	tac 4080
308	ataatttagt ttcatataaa gtatcatcag tgtagaacct aattcaattc	tgt 4140
310	gtttggaaga ctatcttact atttcacaac agcctgacaa catttctata gccaaaa	ata 4200
	gctaaatacc tcaatcagtc tcagaatgtc attttggtac tttggtggcc acataag	
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Input Set : A:\PTO.SS.txt

Output Set: N:\CRF4\09192006\J789526A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seg#:100; N Pos. 5539,5540,5541,5542,5543,5544,5545,5546,5547,5548,5549
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Output Set: N:\CRF4\09192006\J789526A.raw

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/789,526A TIME: 13:18:05

DATE: 09/19/2006

Input Set : A:\PTO.SS.txt

Output Set: N:\CRF4\09192006\J789526A.raw

L:654 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:2632

M:341 Repeated in SeqNo=11

L:3137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98 after pos.:2400

M:341 Repeated in SeqNo=98

L:3336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:2460

M:341 Repeated in SeqNo=99

L:3426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:0

M:341 Repeated in SeqNo=100